

(No Model.)

D. FOCER.  
DUST GUARD.

No. 571,354.

Patented Nov. 17, 1896.

FIG. 1.

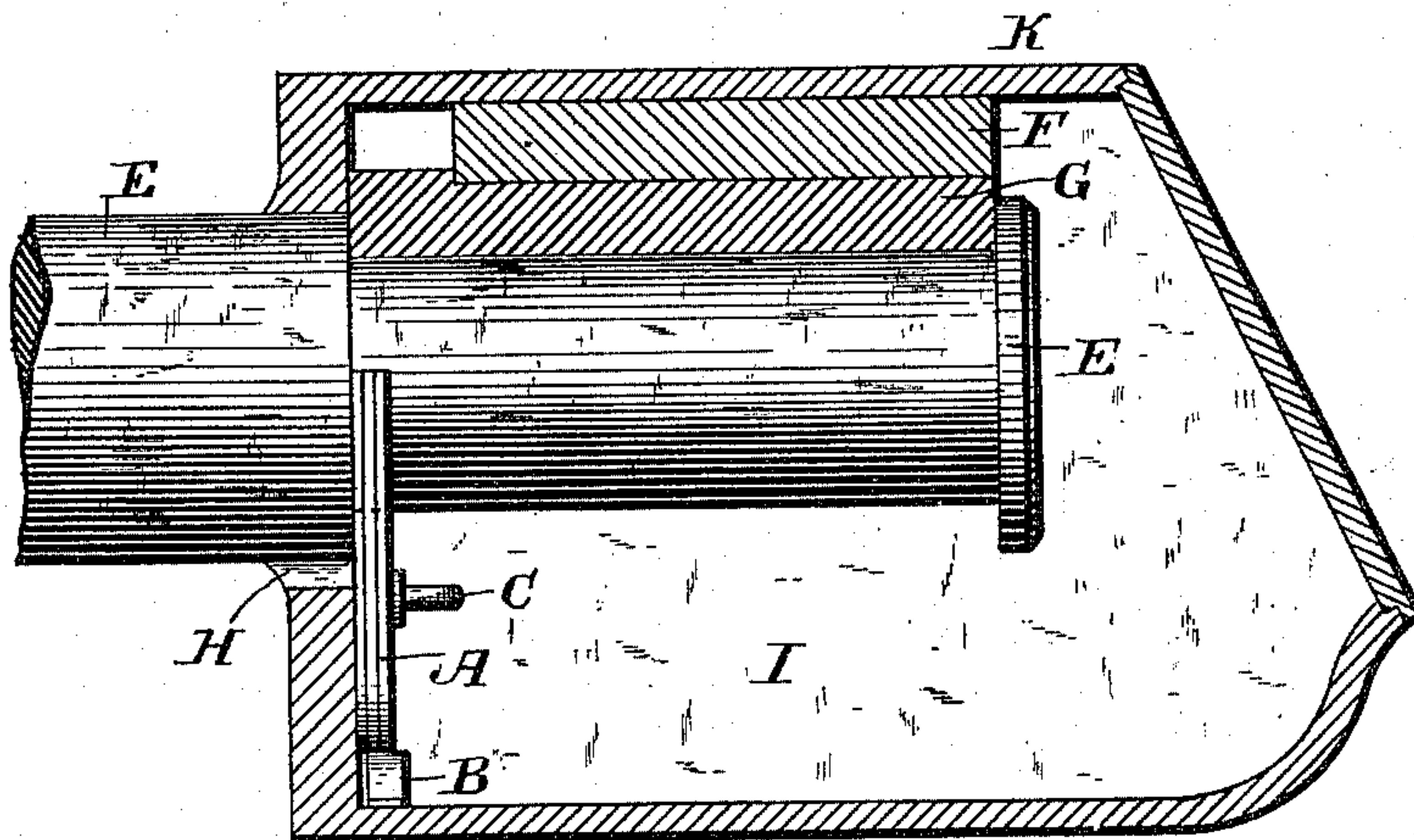


FIG. 2.

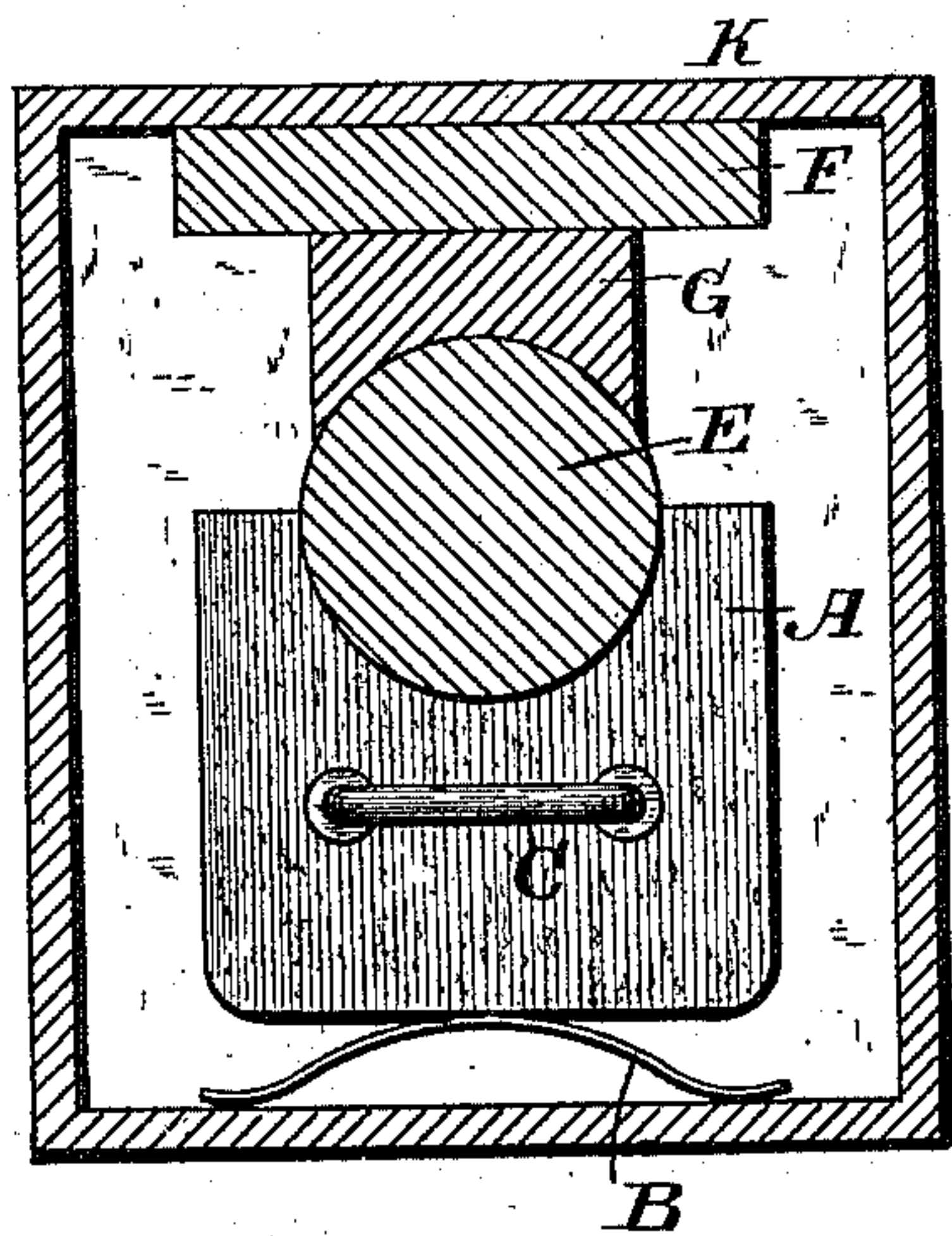
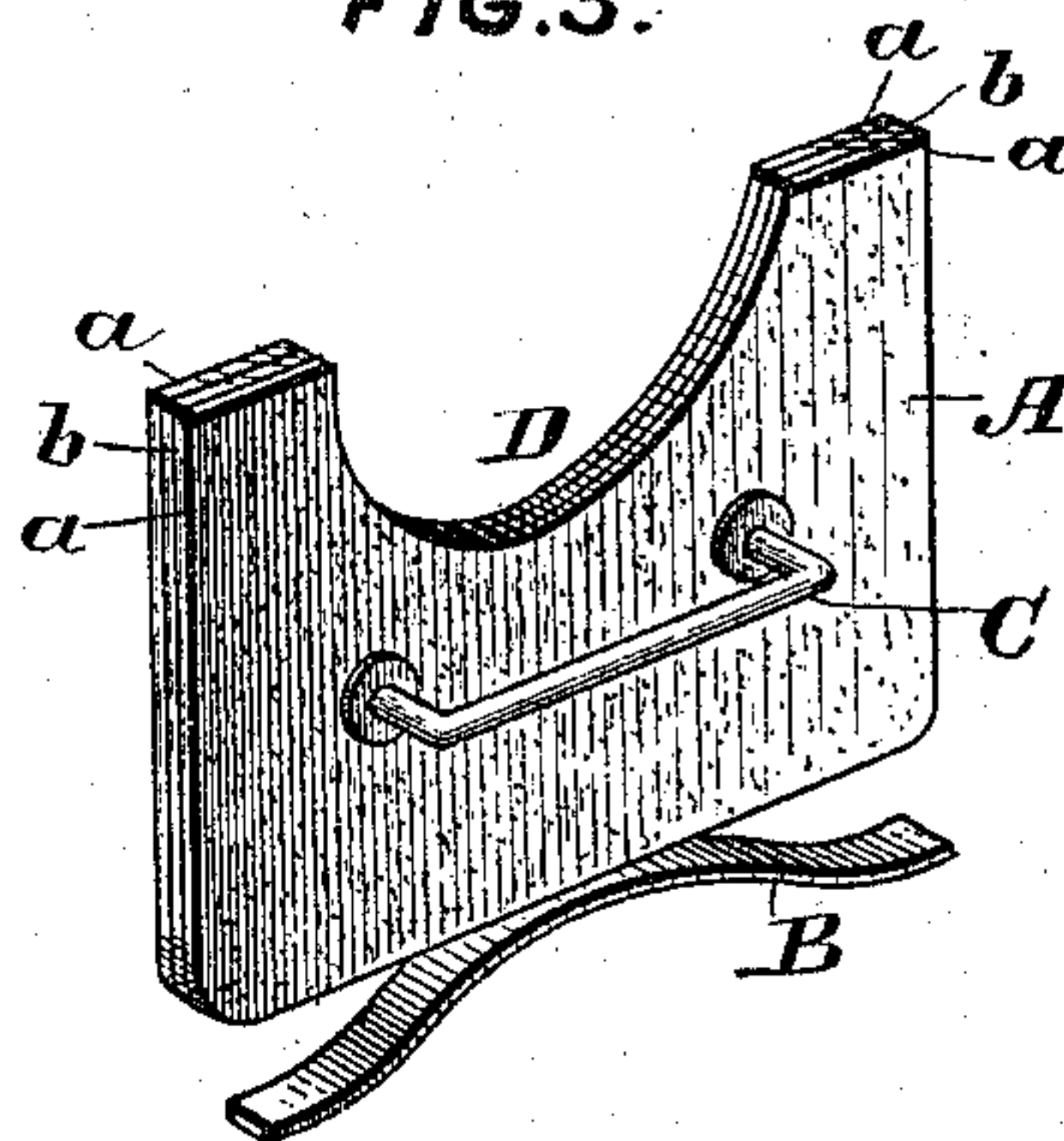


FIG. 3.



ATTEST.

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INVENTOR.

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Atty.



# UNITED STATES PATENT OFFICE.

DANIEL FOCER, OF CAPE MAY, NEW JERSEY, ASSIGNOR TO GEORGE J. RICHARDSON, TRUSTEE, OF PHILADELPHIA, PENNSYLVANIA.

## DUST-GUARD.

SPECIFICATION forming part of Letters Patent No. 571,354, dated November 17, 1896.

Application filed May 8, 1895. Serial No. 548,479. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL FOCER, a citizen of the United States, residing at Cape May city, in the county of Cape May and State of New Jersey, have invented certain new and useful Improvements in Adjustable and Portable Dust-Guards; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in car-axle boxes, and has for its object the formation of an adjustable and portable dust-guard, which is specially adapted to prevent the entrance of dust into the axle-box and its consequent mixing with the packing material, thus by friction causing the journals and brasses to become heated, and which at the same time will be more simple in its construction, more easy and quick of adjustment, and more satisfactory in its working than any similar device now in use.

To this end my invention consists in the construction described in the following specification and set forth in the accompanying drawings, in which—

Figure 1 shows a longitudinal section through the axle-box, showing an edge view of the guard in position. Fig. 2 is a transverse section of the axle-box, showing a front view of the guard in position. Fig. 3 is a detached perspective view of the guard.

The device itself, as shown in Fig. 3, consists of a plate A of a size suited to the size of the axle-box and the journal or shafting to which it is to be fitted, and having a portion hollowed out at the top, as at D, to accommodate the journal. The plate is rounded at the lower corners, and on the under side has preferably a semielliptic spring attached thereto, which bears at its ends against the bottom of the axle-box and serves to keep the plate at all times snugly up against the axle or journal.

In the ordinary construction of car-axle boxes the wear upon the brasses and the back

plate of the axle-box is above the journal, all the pressure being exerted upon the journal from that direction. Consequently while the box may fit tightly to the journal above the same there will be a constantly-increasing opening in the back plate of the box below the journal, as shown at H in Fig. 1. It is the purpose and design of this invention to form a device such as shown which will effectually close this opening and at the same time adjust itself to the upward wear of the journal against the back plate of the axle-box.

In the form of my invention shown in Figs. 1 and 3 the front and back faces *a a* of the dust-guard are preferably made of asbestos with an interposed filling *b* of wood fiber. I may, however, substitute for the latter a metal plate, if desired. The guard is also formed with a handle C, which is designed to facilitate its adjustment and removal.

By reason of the great simplicity of this dust-guard it can be very cheaply constructed, and instead of forming the axle-box with specially-constructed grooves or ledges to adapt it to the forms of axle-boxes of ordinary construction it will be noted that the dust-guard above described is capable of immediate and easy adjustment to any axle-box now in use on the railroads of this country, it only being necessary to raise the lid of the axle-box, remove the packing, insert the guard under the journal, and push it into place by means of a packing-hook or other instrument; or in case it becomes necessary to replace the guard by another it can be easily removed by inserting the packing-hook into the loop or handle C and withdrawing the guard from the box.

This invention is designed not only for a dust-guard to exclude dust from the axle-box, but also serves to prevent undue waste of the lubricating-oil and also to prevent the oil from flowing out under the journal and defacing the wheels and truck-frame.

Although I have described and shown my invention as applied especially to car-axle boxes, it is to be understood that it may be used with any form of journal-box such as are used on street-cars, or on dynamos, or machine-shafting of any kind.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

In a car-axle box having a lid-opening and a single back plate, the combination with the  
5 journal of an adjustable dust-guard adapted to be introduced through the lid-opening of the axle-box, and having its top edge concaved to fit the journal, and having a spring attachment at its center to the bottom of the  
10 guard, said guard when in position contacting directly with the back plate of the axle-

box and provided on its front face with a handle by which the guard may be readily withdrawn from the box, substantially as described.

In testimony whereof I affix my signature  
in presence of two witnesses.

DANIEL FOCER.

Witnesses:

B. F. MOYER,  
C. O. HAIGHT.